U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES Permittee:	Justin Correia (unpermitted facility)
Facility:	Joe Pinheiro Dairy Ex. 6 Personal Privacy (PP) (Conditional Waiver of Waste Discharge Requirements Order R1-2012-0003)
Receiving Water:	Laguna de Santa Rosa
Date of Inspection:	April 16, 2014; 8:30 a.m.
Inspection Participants:	
U.S. EPA:	Glenn Sakamoto, CWA Compliance Office, (415) 972 - 3556 Becky Mitschele, NPDES Office, (415) 972 - 3492
North Coast Regional Water Quality Control Board:	Cherie Blatt ((707) 576 – 2755), and Rebecca Fitzgerald (TMDLs)
Western United Dairymen:	Melissa Lema, Field Representative, (707) 779 - 2214
University of California – Davis:	Deanne Meyer (Extension)
Report Prepared By:	Becky Mitschele, US EPA Region 9
Report Date:	May 12, 2014

CAFO FACILITY INSPECTION REPORT

ATTENDEES: Glenn Sakamoto and Becky Mitschele (USEPA, Region 9), Cherie Blatt and Rebecca Fitzgerald (Regional Water Quality Control Board 1, North Coast Region), Melissa Lema (Western United Dairymen), Deanne Meyer (U.C. California Extension-Davis)

REPORT PREPARED BY: Becky Mitschele, USEPA, Region 9

FACILITY INFORMATION

Inspection Date:	**April 16, 2014; 8:30 a.m.**
Facility Name:	**Joe Pinheiro Dairy**
Facility Address:	**Ex. 6 Personal Privacy (PP)**
Authorized Official & Phone:	
Mailing Address of Authorized Official:	**Same as facility address**
NPDES #:	**Unpermitted**
On-Site Representative:	**Justin Correia, Dairy Operator**
Receiving Water(s):	**Laguna de Santa Rosa**
Inspector(s):	**Glenn Sakamoto, EPA Region 9** **Cherie Blatt, North Coast Water Quality Control Board (NC RWQCB)**

BACKGROUND

The Joe Pinheiro Dairy ("Site") Ex. 6 Personal Privacy (PP) was part of the North Coast Water Quality Control Board (NC RWQCB) effort to complete inspections of all facilities seeking coverage under one of their permits (i.e. NPDES permit, Waste Discharge Requirement (WDR) state permit, or a conditional waiver for a WDR permit). All dairy facilities in the North Coast must be covered by one of these permits or a waiver from the permit requirement. This is the first time that the Board has regulated all operations (i.e. first "permit cycle" for the waiver).

The North Coast Region contains approximately 150 dairies, housing about 50,000 cows. At the time of the inspection, the NC RWQCB had inspected over 100 of these dairies. This round of inspections was the first time the state (and EPA) had visited these particular dairies, including the Joe Pinheiro Dairy. The state was conducting these inspections to determine compliance with waiver requirements and to serve as a reminder to submit their groundwater well and surface water monitoring results. EPA was conducting its inspections to determine whether there are surface water concerns at the Site. While the size of the dairies in Marin and Sonoma are small compared to those in Chino and the Central Valley, they are often located on hills that slope toward creeks and streams. These waterbodies are vulnerable to manure/process waste water runoff, especially during the rainy season.

The Site is not permitted to discharge pollutants under the Clean Water Act and is operating under a conditional waiver (Conditional Waiver No. R1-2012-003), which allows eligible facilities, including the Joe Pinheiro Dairy, to operate without a discharge permit. The conditional waiver acts like a permit by establishing best management practices, monitoring and reporting requirements, and other requirements (herein referred to as "conditional waiver" or "conditional waiver of WDR"). The conditional waiver is available to any size operation that poses a low or insignificant risk to surface or groundwater. The NC RWQCB issued the conditional waiver on January 19, 2012, which expires January 19, 2017.

INSPECTION OBSERVATIONS

On April 14, 2014, Glen Sakamoto (US EPA Inspector) and Cherie Blatt (NC RWQCB Inspector) conducted a joint federal/state compliance evaluation inspection of the Joe Pinheiro Dairy facility to determine compliance with federal and state requirements. Becky Mitschele (US EPA Permitting Specialist), Rebecca Fitzgerald (NC RWQCB TMDL section), Melissa Lema (Western United Dairymen), and Deanne Meyer (UC-Davis Extension) were also in attendance. The inspectors arrived at the Site announced and contacted Mr. Justin Correia to begin the inspection. Mr. Justin Correia arrived promptly and granted access to the Site. Mr. Justin Correia was present throughout the inspection, from the opening conference until the end of the exit interview. Weather at the time of the inspection was about 70°F and sunny.

At the opening conference, Glenn and Cherie asked to inspect the following areas of the Site: the confinement areas, including the stabling area, stormwater conveyances, manure storage and handling areas, the perimeter of the Site, and any surface waters either adjacent to, or that might receive flows from, the Site. We visited the nearest surface water, unnamed creek and Irwin Creek (both tributaries to Laguna de Santa Rosa), immediately adjacent to the perimeter of the Site.

The Site is an approximately 150-acre conventional dairy farm with grazing fields and a production area. The Site has been operational since the 1963, but Mr. Justin Correia just took over from his grandfather, Joe Pinheiro. Mr. Justin Correia stated that he spreads manure and/or process wastewater to 130 (out of 150) acres. The facility land applies all manure/process wastewater (i.e. no offsite transfer). The manure is spread to fields 2 and 3 (see Figures 2 and 3 for land application fields). The Site does not have any fresh water ponds or silage onsite.

Mr. Justin Correia reported, at the time of the inspection, 330 milking and dry cows and 60 other cows, which is over the permitted capacity of 300 milking and dry cows and other 70 for other cows. The Site is in the process of updating the permitted inventory numbers. EPA regulations defines dairy facilities as Large Concentrated Animal Feeding Operations (Large CAFOs) if there are greater than 700 mature dairy cows (40 CFR Part 122.23(b)(2)). The Site has a draft nutrient management plan, which is awaiting NRCS signature.

The NC RWQCB has no general permit available for dairies facilities; each such facility that discharges would be required to apply for individual permit coverage. There is a conditional waiver from state permit coverage available from the NC RWQCB. The conditional waiver of WDR permit is a general permit applicable to existing dairy operations that have not expanded (as of 1/19/12). RB 1 requires new or expanding dairies to apply for an individual WDR or individual waiver of WDR permit (as opposed to seeking coverage under the general permit).

The conditional wavier of WDR permit prohibits discharges to surface water and groundwater, requires specific production and land application best management practices, and establishes record keeping and monitoring requirements. Specifically, the waiver permit prohibits:

- Direct discharges to groundwater;
- Discharges of manure and process wastewater to surface water or groundwater;
- Discharges from the production area of stormwater that has come into contact with manure or process wastewater;
- Discharges to surface waters via tile drain lines or irrigation return flows (i.e. tailwater), including irrigation water that comes into contact with process wastewater or manure;

- Discharges from the land application that do not comply with the requirements in the water quality plan (or nutrient management plan for Large CAFOs) and the monitoring and reporting plan;
- Disposal of mortalities in liquid manure or process wastewater systems; and
- Animal access (i.e. direct contact) to surface water within production area.

According to Mr. Justin Correia, the facility has not discharged. He cleans out the manure ponds every year (by September or October). He does not grow crops, only pasture. He stated he had enough land to graze up to 450 cows.

The inspectors observed high weed growth on the berms of the manure ponds 1 and 2 (see photo 11). The inspectors also observed buildings without rain gutters.

The Site has 3 stream crossing for the cattle. The inspectors observed cattle footprints on the banks of the unnamed creek.

AREAS OF CONCERN

Potential for Unauthorized Discharges:
Because this Site does not have an NPDES permit, discharges from the Site to Waters of the United States are prohibited. The State of California regulates discharges to all "waters of the state," which include both surface waters and groundwater (Porter-Cologne Water Quality Control Act § 13050). Per 27 CCR § 13264(a), no person shall initiate any new discharge of waste to waters of the state prior to issuance of waste discharge requirements or a waiver of such requirements. Part 24 and 25, Prohibitions, of the conditional waiver the Site has been operating under, prohibits the discharge of manure, litter, and process wastewater, or stormwater that has come into contact with manure, litter, and process wastewater. Therefore, the operator must ensure that no discharges to Waters of the United States occur without authorization by the permitting authority.

The inspectors observed high weed growth on the manure ponds. Weed growing on manure ponds should be trimmed regularly to aid in checking the pond for leaks.

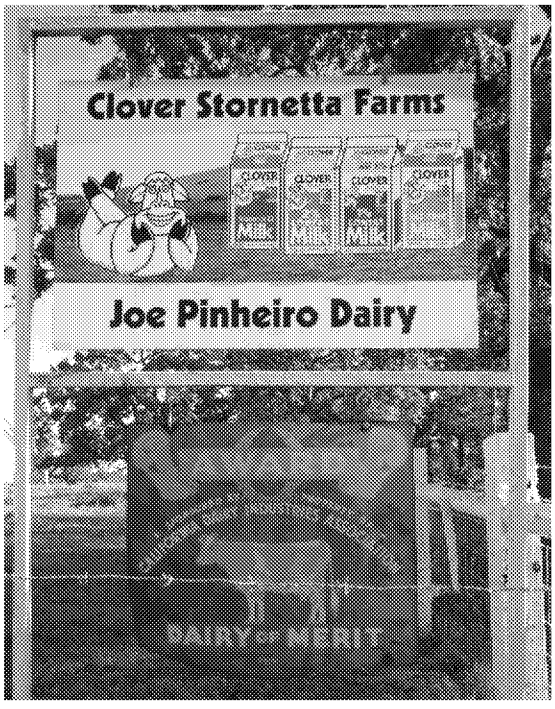
Some of the buildings do not have stormwater gutters. Gutters collect clean stormwater and direct water away from manured areas. Redirecting clean stormwater is one way to preserve manure capacity during heavy storm events.

The Site might need additional best management practices near the cattle crossings to ensure that manure and sediment do not enter the creek. (See maps X and X that show bare soil areas on and near the cow crossings of Irwin Creek and unnamed tributary to Irwin Creek). The Site should ensure that cattle do not have direct access to the creek and that areas adjacent to the creek are re-vegetated.

The location of the production area and about half of the land application fields are within the 100-year floodplain of the Laguna de Santa Rosa. Due to this proximity, the Site should ensure that all manured areas are on concrete or compacted soil. The Site must prevent runoff to surface waters.

Photographs and Maps

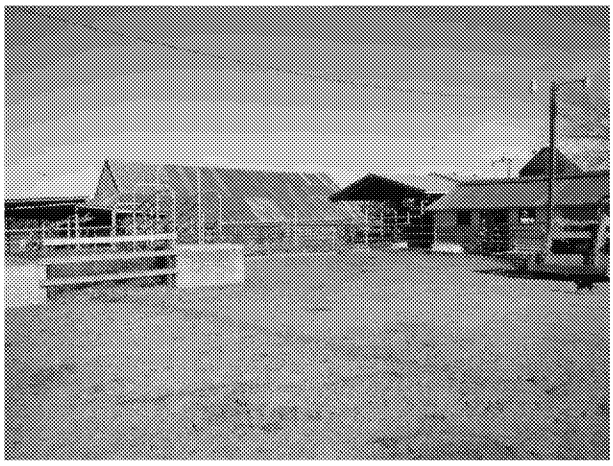
Photo Log - *April 16, 2014 by Cherie Blatt, NC Regional Water Quality Control Board*



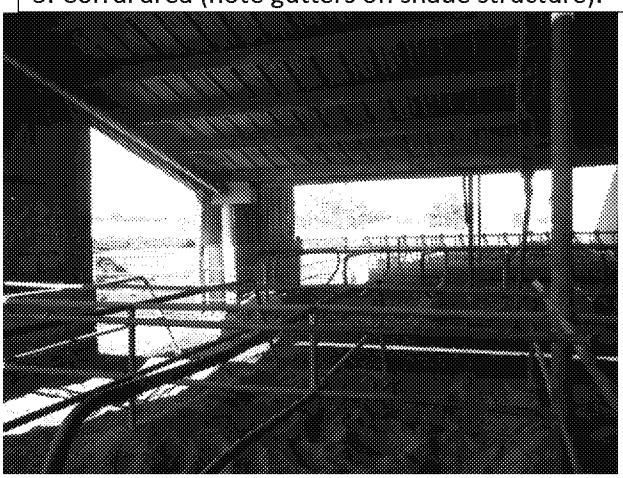
1. Dairy Sign.

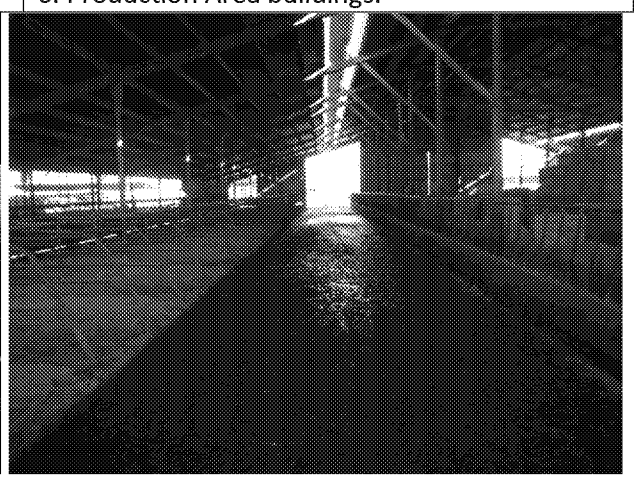
2. Pasture (#4) with water trough located just North of Production Area.

3. Fuel Storage.	4. Milk Barn. Note roof gutters.

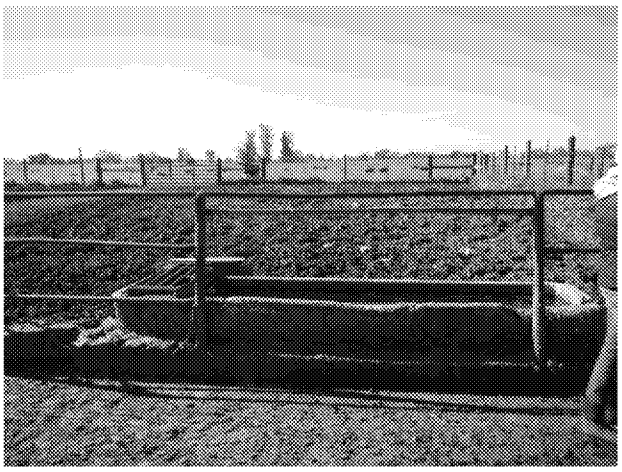


5. Corral area (note gutters on shade structure).	6. Production Area buildings.

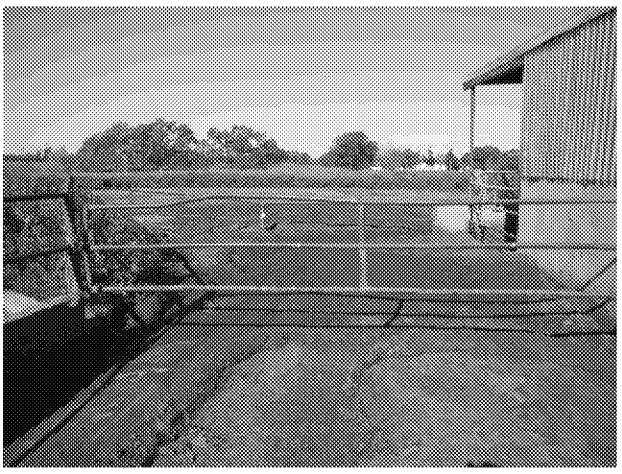


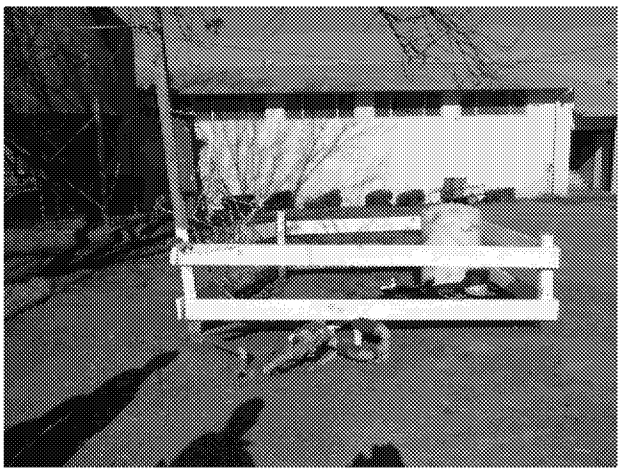


7. Freestall Barn.	8. Freestalls on left, hay storage on right with scraped lanes.



9. Scraped lanes south along barn.	10. Corral area.

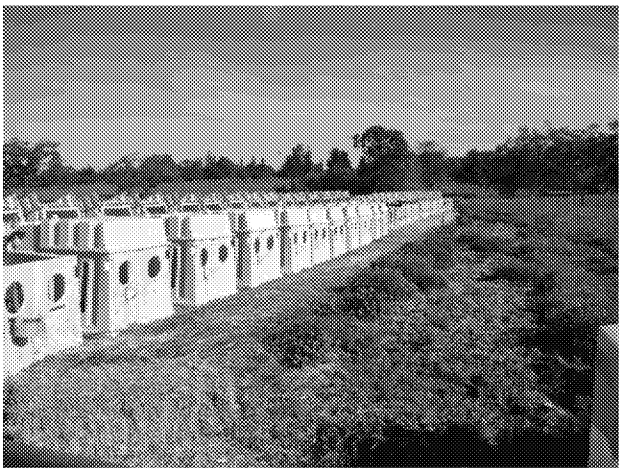




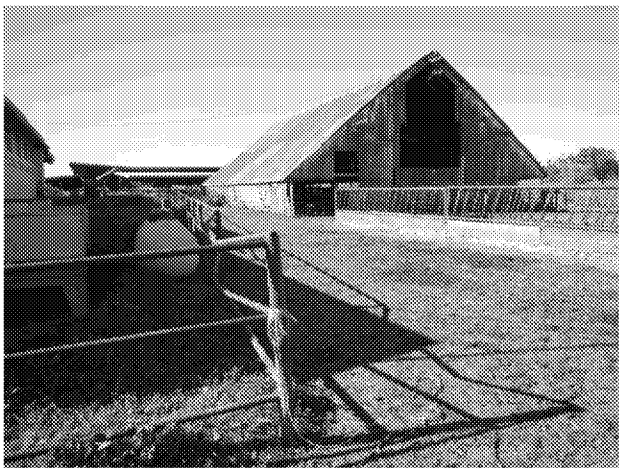
11. Concrete lane scraped to manure solids pond.	12. Well East of Milk Barn.

13. Milk Barn. Note gutters.

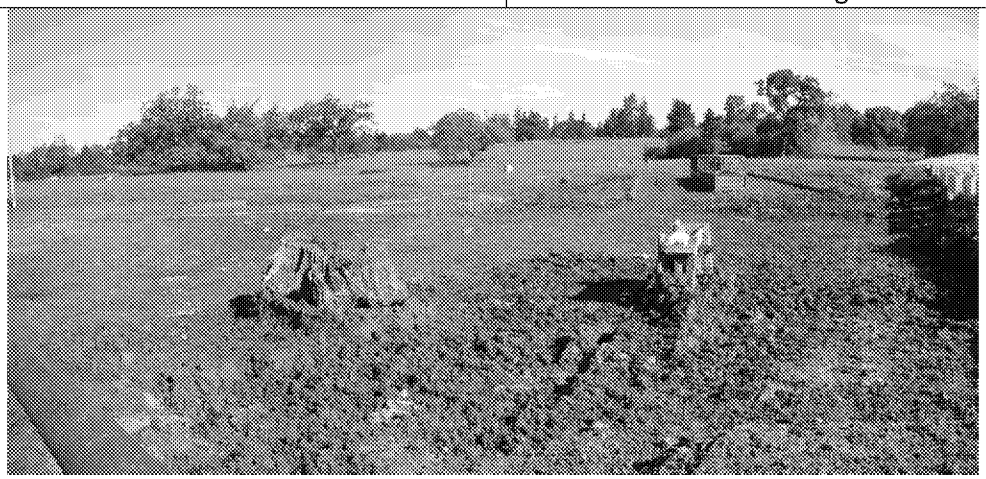
14. Lane to pastures.



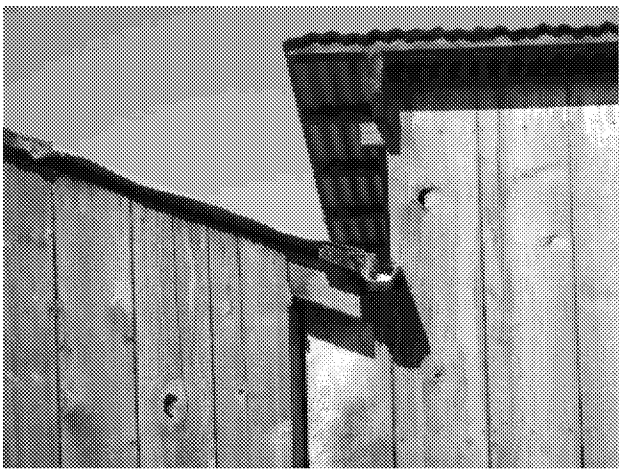
15. Calf hutches.



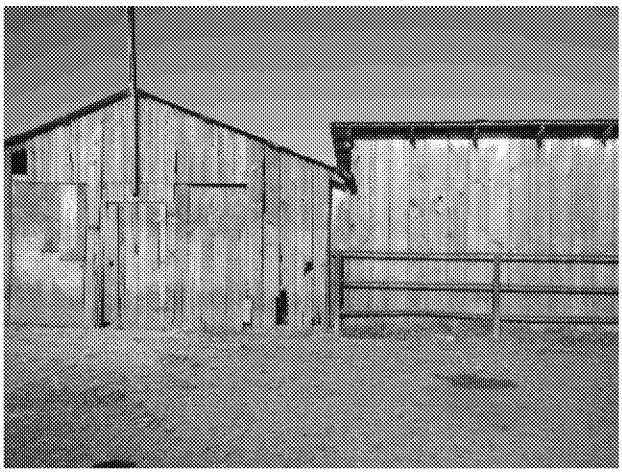
16. Production area looking south.



17. Corral area.

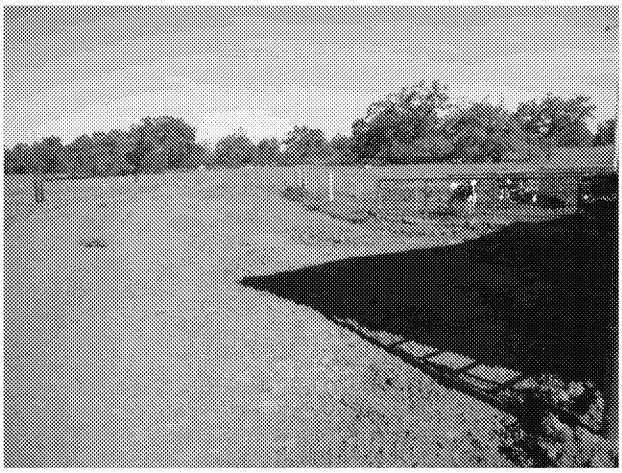


18. Gutter system on barns.

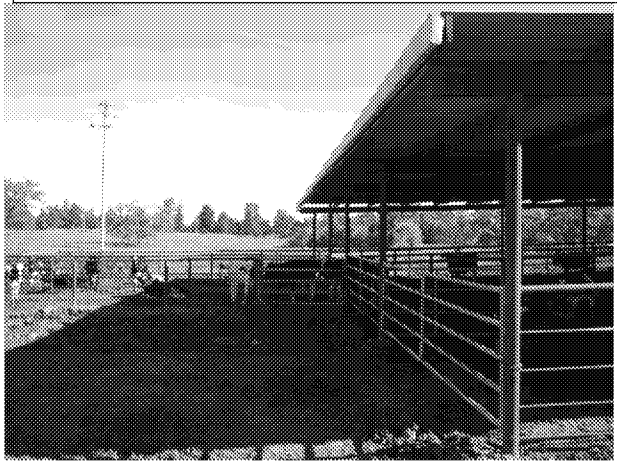


19. Gutter system on barns.

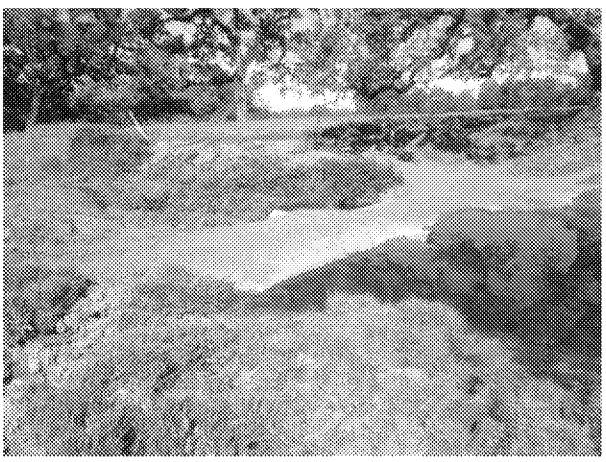
20. Northwest Production Area.



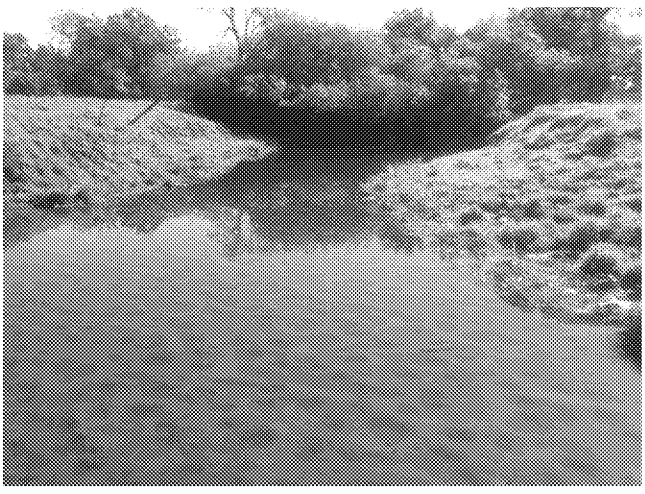
21. Corral near pasture.



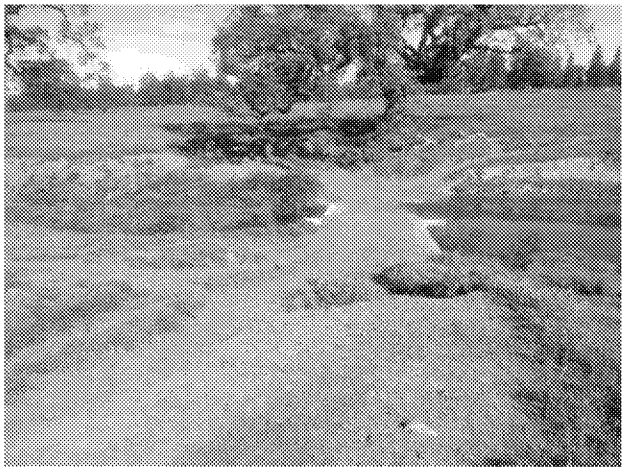
22. Corral in Production Area. Note rain gutters on roofed structure.

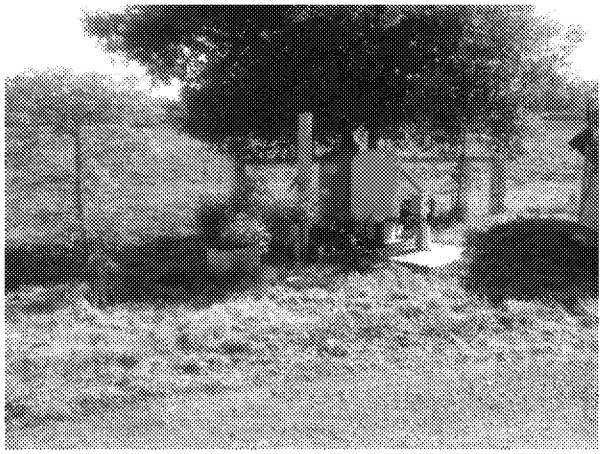


23. Cattle crossing of tributary to Laguna de Santa Rosa



24. Tributary to Laguna de Santa Rosa near cattle crossing. Note pasture is on both sides of this creek.	25. Tributary to Laguna de Santa Rosa





26. Cattle crossing of tributary to Laguna de Santa Rosa	27. Well located Northeast of house.

Figure 1. Satellite image from Google Earth of production and surrounding land application fields.

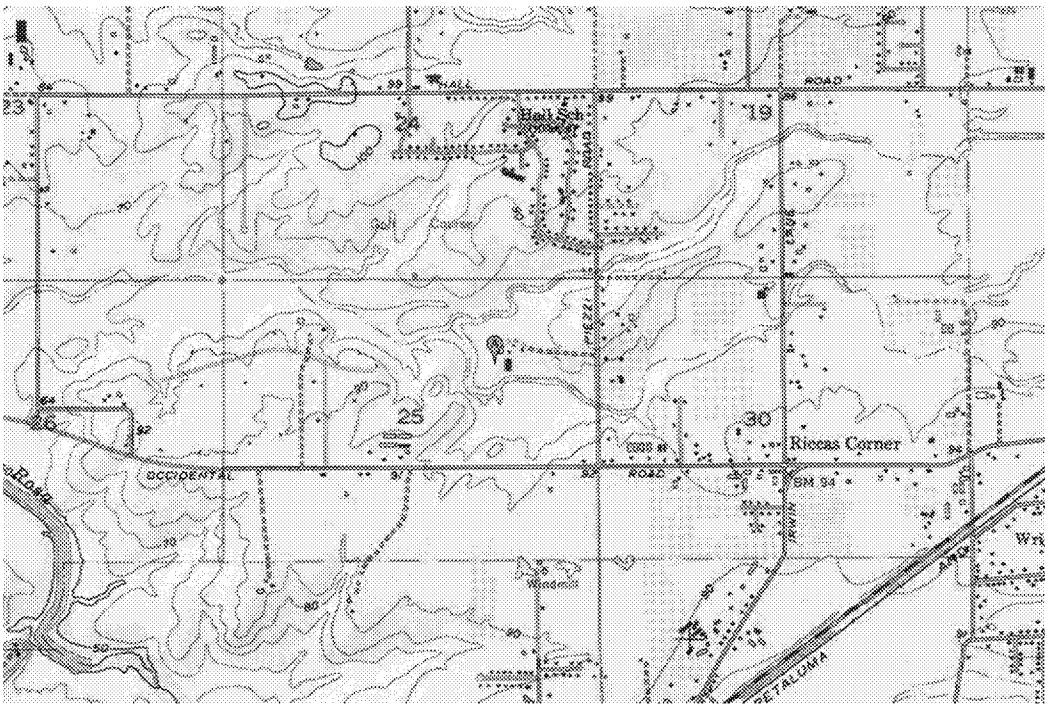


Figure 2. Topographic map.

Figure 3. Map of production area showing direction of water flows.

Figure 4. Map of production and all land application fields.

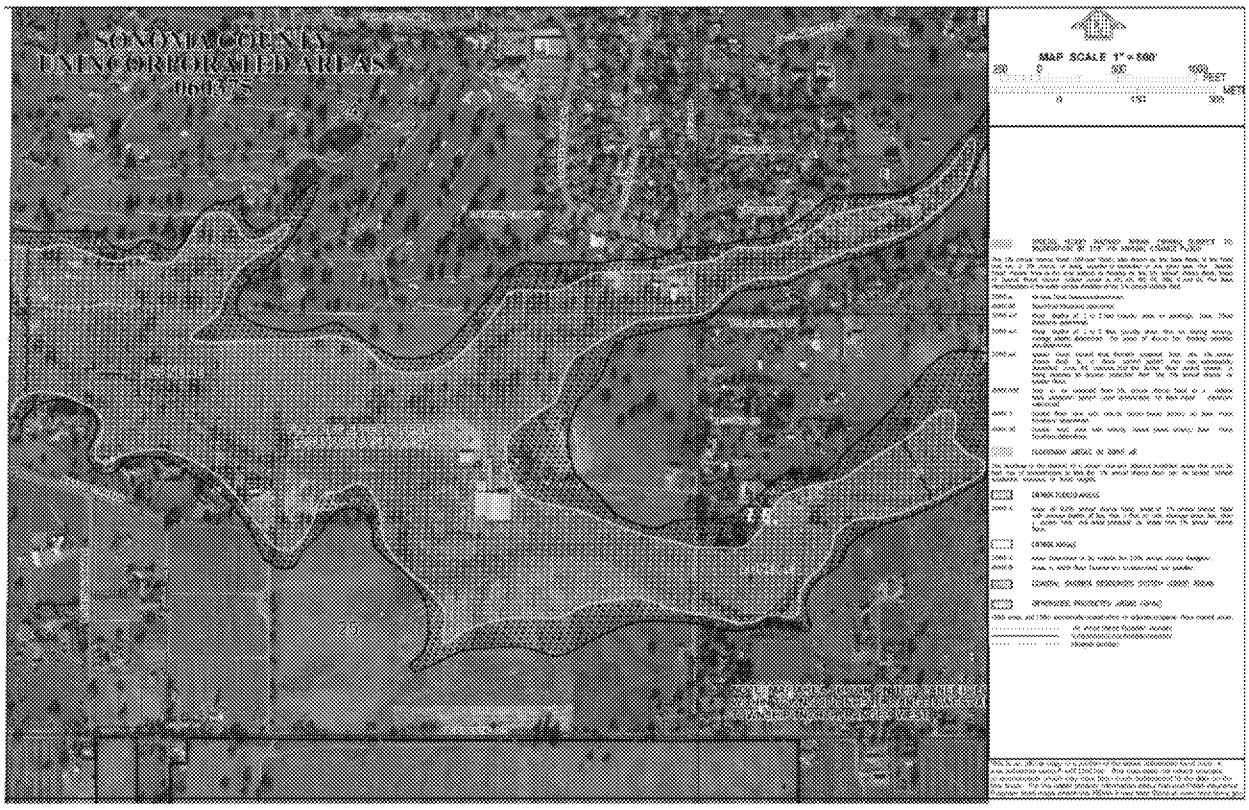


Figure 5. Map of 100-year floodplain (FEMA map).